

REMARKS

The Office Action dated April 22, 2005 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claim 1 has been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 2-5 have been canceled without prejudice. No new matter has been added and no new issues are raised which require further consideration or search. Claims 1, 6-8, and 19-21 are currently pending in the application and are respectfully submitted for consideration.

The Applicants wish to thank the Examiner for the courtesy extended in conducting the Interview on July 19, 2005. The amendment to claim 1 submitted herein corresponds to the amendment discussed during the Interview.

In the Office Action, claims 1, 2, 6, 19, 20, and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Dean (U.S. Patent No. 6,173,173) in view of Rudokas (U.S. Patent No. 6,185,416). The Office Action took the position that Dean discloses all of the elements of the claims, with the exception of detaching a registered terminal from the network. The Office Action then relies upon Rudokas as allegedly curing this deficiency in Dean. The above rejection is respectfully traversed for the reasons which follow.

Claim 1, upon which claims 6-8 and 19-21 are dependent, recites a method for performing a detach of a wireless terminal registered to a telecommunication network by

associating an identification for the terminal, deriving a signature for the identification, and allocating a pair consisting of the identification and the signature to the terminal. The method includes the steps of sending a detach request including the identification and the identification signature from the registered terminal to the network, receiving the detach request at the network side, comparing the received detach request with a record of registration data of the terminal kept at the network side, and detaching the terminal from the network, if the received detach request coincides with the record of registration data. The detach is issued by the terminal if the terminal is in one of power off state, low battery state, and SIM removal state.

Therefore, the present invention provides a method for preventing a malicious user from interrupting a third party's calls by sending detach messages with random identities of mobile stations. In particular, the present invention enables an immediate authentication of the mobile station requesting a detach procedure upon receipt of the detach request message or the detach request. In addition, the authentication procedure is not time consuming and may be applied when the mobile station is being switched off or has a low battery level. Furthermore, due to the fact that the detach request includes the identifier as well as the identifier signature, the authentication process is highly secure.

As will be discussed below, Dean and Rudokas, whether viewed singly or combined, fail to disclose or suggest all of the elements of the claims, and therefore fail to provide the advantages discussed above.

Dean discloses an invalid mobile telephone call terminating system and method. An invalid mobile telephone call, which is made within the service area of a vendor, is monitored by a vendor computer. The vendor computer may detect the invalid call by RF fingerprinting or other similar method. The vendor computer transmits a kill-call command over a TCP/IP network to a kill-call server that is interfaced with a mobile service center through a data link interface. The kill-call server determines whether the kill-call command is valid and then transmits a tear down request over the data link interface to an executive cellular processor, which conveys a call termination message to the associated administrative call processing database node to effect call termination.

Rudokas discloses a method and apparatus for fraud control in cellular telephone systems. Call records are scanned to identify a fraudulent cellular phone based on its behavior. An identifier, such as an RF signature, representative of the fraudulent cellular phone is stored in fraud control equipment located at a cell site. A database of identifiers may comprise a positive validation database storing identifiers for all valid cellular phones used in the cellular telephone system. Alternatively, a negative validation database storing the identifiers for known fraudulent cellular phones may be used. A control channel editor intercepts a call origination request transmitted from a cellular phone to the cell site, and compares one or more characteristics of the cellular phone transmitting the call origination request to the database of identifiers. The control channel editor then prevents the completion of the phone call when the comparison indicates that the cellular phone is fraudulent. The call origination request can be

prevented from completing by rerouting the call to a customer service number, interrupting the call origination request, transmitting a hang-up message to the phone, transmitting a hang-up message to the cell site, or transmitting a tear-down message to a switch.

Applicants respectfully submit that Dean and Rudokas, whether viewed alone or in combination, fail to disclose or suggest the elements of the present claims. Specifically, the cited references fail to disclose or suggest that the detach request, including the identification and the identification signature, is sent from the registered terminal to the network, as recited in claim 1. Dean only discloses that a kill-call request is generated and sent from a vendor computer to a kill-call server (Dean, Column 1, lines 57-67 and Column 3, lines 34-44). Applicants respectfully assert that the vendor computer cannot be considered to correspond to the registered terminal of the claimed invention. The registered terminal is the entity that is going to be detached from the network, as recited in lines 11-12 of claim 1. Whereas the vendor computer is an external application which determines that an invalid call is on-going, and sends the kill-call command to the kill-call server (Dean, Figure 1 and Column 2, lines 42-45). Therefore, Dean does not disclose or suggest sending a detach request from the registered terminal, as recited in the present claims. Furthermore, Rudokas also fails to disclose or suggest such a limitation.

In addition, Applicants respectfully submit that Dean and Rudokas, whether viewed singly or combined fail to disclose or suggest that the detach is issued by the terminal if the terminal is in power off state, low battery state, or SIM removal state, as

recited in present claim 1. As discussed above, Dean is directed to detecting and tearing down invalid or fraudulent calls. A terminal which is in power off state, low battery state, or SIM removal state would not be able to initiate any call, including an invalid call. Therefore, an invalid call would not exist and Dean would not initiate any kill-call or detach request. Furthermore, as discussed above, Dean discloses that a vendor computer issues the kill-call command. However, Dean clearly does not disclose or suggest that the vendor computer issues a kill-call request when it is in power off state, low batter state or SIM removal state. In fact, it would likely be impossible for the vendor computer to detect an invalid call if it was in power off state, for example. Furthermore, Rudokas also fails to disclose or suggest this limitation of claim 1.

Therefore, for at least the reasons discussed above, Applicants respectfully request that the rejection of claim 1 be withdrawn.

Applicants note that claims 6 and 19-21 are dependent upon claim 1. Thus, claims 6 and 19-21 should be allowed for at least their dependence upon claim 1, and for the specific limitations recited therein.

The Office Action rejected claims 3-5 under 35 U.S.C. §103(a) as being unpatentable over Dean in view of Rudokas and further in view of well known prior art. As mentioned above, claims 3-5 have been canceled. Therefore, the rejection of claims 3-5 is rendered moot.

Claims 7 and 8 were rejected under 35 U.S.C. §103(a) as being unpatentable over Dean in view of Rudokas and further in view of Kuriki (U.S. Patent No. 5,765,105). The

Office Action took the position that Dean and Rudokas disclose all of the elements of the claims, with the exception of a temporary and international subscriber identity. The Office Action then relies upon Kuriki as allegedly curing this deficiency in the combination of Dean and Rudokas. The above rejection is respectfully traversed for the reasons which follow.

Dean and Rudokas are discussed above. Kuriki is directed to a GSM communication system which includes multiple mobile stations that share a single international mobile subscriber identity. When one of the mobile stations generates a call origination or call termination request, the mobile switching center provides the requested service only if the international mobile subscriber identity and the international mobile equipment identity attached to the mobile station is stored by the mobile switching center.

Claims 7 and 8 are dependent upon claim 1. As discussed above, the combination of Dean and Rudokas fails to disclose or suggest all of the elements of claim 1. Additionally, Kuriki fails to cure the deficiencies in Dean and Rudokas. Specifically, Kuriki also fails to disclose or suggest sending a detach request from the registered terminal and also fails to disclose or suggest that the detach is issued by the terminal if the terminal is in power off state, low battery state, or SIM removal state. Therefore, claims 7 and 8 should be allowed for at least their dependence upon claim 1, and for the specific limitations recited therein.

Applicants respectfully submit that the cited prior art fails to disclose or suggest critical and important elements of the claimed invention. These distinctions are more

than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1, 6-8, and 19-21 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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